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OM protein - protein search, using sw model

Run on: September 3, 2005, 19:40:54 ; Search time 88.7805 Seconds
(without alignments)
43.564 Million cell updates/sec

Title: US-09-991-809-1

Perfect score: 46

Sequence: 1 alvqgmeqlr 10

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A_Geneseq_16Dec04:*

1: Geneseq1980s:*

2: Geneseq1990s:*

3: Geneseq2000s:*

4: Geneseq2001s:*

5: Geneseq2002s:*

6: Geneseq2003as:*

7: Geneseq2003bs:*

8: Geneseq2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	46	100.0	10	4	Aau28744 DPI trypt
2	46	100.0	10	4	Aau25332 Schizophr
3	46	100.0	10	4	Aau26392 Depressio
4	46	100.0	10	4	Aau15676 Schizophr
5	46	100.0	10	4	Abbs2411 Human API
6	46	100.0	10	4	Abbs2302 Human API
7	46	100.0	10	4	Abbs52318 Human API
8	46	100.0	10	6	Abp57113 Breast ca
9	46	100.0	10	6	Abp57113 Human API
10	46	100.0	10	8	Abbs58784 Alzheimer
11	46	100.0	10	8	Adh35746 Apolipop
12	46	100.0	10	8	Adh35753 Apolipop
13	46	100.0	10	8	Adn31699 Human Alz
14	46	100.0	10	8	Ado78943 Schizophr
15	46	100.0	12	8	Ades52383 Human apo
16	46	100.0	28	2	Aar82729 Human apo
17	46	100.0	28	2	Aaw70713 Apolipop
18	46	100.0	194	2	Aar39483 Human apo
19	46	100.0	328	2	Aar39484 Human apo
20	46	100.0	333	2	Aar39488 Human apo
21	46	100.0	333	2	Aar39481 Human apo
22	46	100.0	333	2	Aar39497 Human apo
23	46	100.0	333	2	Aar39490 Human apo
24	46	100.0	337	2	Aar39485 Human apo
25	46	100.0	337	2	Aar39492 Human apo
26	46	100.0	337	2	Aar39494 Human apo

26	46	100.0	342	2	AAR39487	Human apo
27	46	100.0	342	2	AAR39491	Human apo
28	46	100.0	342	2	AAR39489	Human apo
29	46	100.0	342	2	AAR39498	Human apo
30	46	100.0	346	2	AAR39493	Human apo
31	46	100.0	363	2	AAR39478	Human apo
32	46	100.0	363	2	AAR39479	Human apo
33	46	100.0	373	2	AAR39486	Human apo
34	46	100.0	377	2	AAR39502	Human apo
35	46	100.0	377	2	AAR39443	Human apo
36	46	100.0	377	2	AAR45244	Human apo
37	46	100.0	377	2	AAR39501	Human apo
38	46	100.0	377	2	AAR45242	Human apo
39	46	100.0	377	2	AAR39480	Human apo
40	46	100.0	377	2	AAR39499	Human apo
41	46	100.0	377	2	AAR39500	Human apo
42	46	100.0	377	2	AAR45243	Human apo
43	46	100.0	396	4	AAB90664	Human sec
44	46	100.0	396	5	AAOI5885	Human apo
45	46	100.0	396	5	AAU10862	Human apo

ALIGNMENTS

RESULT 1

AAU28744

ID AAU28744 standard; peptide; 10 AA.

XX AC AAU28744;

XX DT 03-JAN-2002 (first entry)

XX DE DPI tryptic digest peptide #341.

XX KW Human; depression associated protein isoform; tryptic digest peptide;
DPI; cerebrospinal fluid; CSF; BAD; bipolar affective disorder;
neuropsychiatric disorder; bipolar mood disorder; neuroleptic;
maniac-depressive illness; schizoaffective disorder.

OS Homo sapiens.

XX WO200162787-A1.

XX PD 30-AUG-2001.

XX PF 23-FEB-2001; 2001WO-GB000786.

XX PR 24-FEB-2000; 2000GB-00004412.

XX PR 08-DEC-2000; 2000GB-00030050.

XX PR 12-DEC-2000; 2000US-0254830P.

XX PA (OXFO-) OXFORD GLYCOSCIENCES UK LTD.

XX PI Herath HMC, Parekh RB, Rohlf C, Terrett JA, Tyson KL;

XX WPI; 2001-570626/64.

XX PT Novel nucleic acid encoding a protein associated with bipolar affective disorder, which is used for diagnosis, prophylaxis and therapy of neuropsychiatric disorders, such as bipolar affective disorder.

XX PS Disclosure; Page 38; 153pp; English.

XX CC The present invention relates to the identification of depression associated protein isoforms (DPIs), particularly the tryptic digest peptides of these proteins. Some of the DPIs (AAU28404-AAU28625) described are decreased in the cerebrospinal fluid (CSF) of BAD (bipolar affective disorder) subjects, whilst other DPIs (AAU28626-AAU28887) are increased in BAD subjects. Also described are peptide sequences identified from DPI-45 and DPI-213 and the nucleic acid sequence they are encoded by. The sequences of the invention are useful for clinical screening, diagnosis, prognosis, therapy and prophylaxis of

AC AAU15676;
 XX 24-OCT-2001 (first entry)
 XX Schizophrenia-associated isoform peptide #561.
 DE Schizophrenia; neuroleptic; diagnostic; neuropsychiatric disorder;
 XX Schizophrenia; neuroleptic; diagnostic; neuropsychiatric disorder;
 KW neurological disorder; neuropathy.
 KW Homo sapiens.
 OS Homo sapiens.
 XX WO200163293-A2.
 PN 30-AUG-2001.
 XX 23-FEB-2001; 2001WO-GB000783.
 XX 24-FEB-2000; 2000GB-00004415.
 PR 28-DEC-2000; 2000US-00750395.
 XX (OXFO-) OXFORD GLYCOSCIENCES UK LTD.
 PA Herath HMWAC, Parekh RB, Rohlf C;
 PI WPI; 2001-502868/55.
 XX Diagnosing and monitoring Schizophrenia by detecting the presence of
 PT Schizophrenia Associated Features and Schizophrenia Associated Protein
 PT Isoforms in samples of cerebrospinal fluid.
 XX Claim 6; Page 40; 160pp; English.
 CC The invention relates to methods and compositions for screening,
 CC diagnosis and prognosis of Schizophrenia. The method involves detecting
 CC the presence of Schizophrenia (SCH) Associated Features (SfS) and SCH
 CC Associated Protein Isoforms (SPIs) in samples, e.g. by electrophoresis,
 CC immunoassay or hybridisation assay, for diagnosing and monitoring SCH,
 CC studying the effectiveness of treatments and for identifying potential
 CC therapeutic agents. The method is used for (1) screening or diagnosis of
 CC SCH and the relative abundance of at least 1 chosen feature correlates
 CC with the presence or absence of SCH; and (2) monitoring the effect of
 CC therapy administered to a subject with SCH and the relative abundance of
 CC at least 1 chosen feature which correlates with the severity of SCH. The
 CC expression and activity of the SfS, SPIs and related molecules (e.g.
 CC secondary messengers) are studied to diagnose SCH, monitor the progress
 CC of the disorder and the effectiveness of treatment and as targets to
 CC identify and produce potential therapeutic agents for the treatment of
 CC SCH. The paucity of detectable neuroalgalic defects distinguishes
 CC neuropsychiatric disorders such as SCH from neurological disorders, where
 CC manifestations of anatomical and biochemical changes have been identified
 CC in many cases. Consequently the identification and characterisation of
 CC cellular and/or molecular causative defects and neuropathies are
 CC necessary for improved treatment of neuropsychiatric disorders. AAU15114-
 CC AAU15762 represent the amino acid sequences of schizophrenia-associated
 CC isoforms used in the method of the invention
 XX
 SQ Sequence 10 AA;
 Query Match 100.0%; Score 46; DB 4; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.084;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ALVQOMEQLR 10
 |||||
 Db 1 ALVQOMEQLR 10
 RESULT 5
 ABB52411
 ID ABB52411 standard; peptide; 10 AA.
 XX
 AC ABB52411;
 XX

DT 08-FEB-2002 (first entry)
 XX Human API-161 tryptic digest peptide #4.
 XX Human; neuroprotective; nootropic; gene therapy; vaccine;
 KW Alzheimer's disease; Alzheimer's Disease-Associated Feature; AF;
 KW Alzheimer's Disease-Associated Protein Isoform; API; tryptic digest;
 KW Expression Reference Protein Isoform; ERPI; proteolysis.
 XX Homo sapiens.
 XX WO200175454-A2.
 PN 11-OCT-2001.
 XX 03-APR-2001; 2001WO-US010908.
 XX 03-APR-2000; 2000US-0194504P.
 PR 28-NOV-2000; 2000US-0253647P.
 XX (OXFO-) OXFORD GLYCOSCIENCES UK LTD.
 PA (PFIZ) PFIZER INC.
 XX Durham KL, Friedman DL, Herath HMWAC, Kimmel LH, Parekh RB;
 PI Potter DM, Rohlf C, Silber BM, Stiger TR, Sunderland PT;
 PI Townsend RR, White F, Williams SA;
 XX WPI; 2001-639384/73.
 XX Screening for Alzheimer's disease in a mammal, by making two-dimensional
 PT array of a feature whose relative abundance correlates with disease, and
 PT comparing with abundance of the feature in samples of healthy persons.
 XX Example; Page 35; 162pp; English.
 CC The invention relates to methods for the screening, diagnosis and
 CC prognosis of Alzheimer's disease. The methods involve the detection of
 CC Alzheimer's Disease-Associated Features (AFs) and Alzheimer's Disease-
 CC Associated Protein Isoforms (APIs) in cerebrospinal fluid, serum or
 CC plasma. The abundance of the AFs and APIs is then normalised to an
 CC Expression Reference Protein Isoform (ERPI) in order to determine whether
 CC a patient is suffering from, or has a predisposition to, Alzheimer's
 CC Disease. The relative abundance of the AFs and APIs correlates with the
 CC severity of Alzheimer's Disease. The present sequence is a peptide
 CC produced from an API by proteolysis
 XX
 SQ Sequence 10 AA;
 Query Match 100.0%; Score 46; DB 4; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.084;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 ALVQOMEQLR 10
 |||||
 Db 1 ALVQOMEQLR 10
 RESULT 6
 ABB52302
 ID ABB52302 standard; peptide; 10 AA.
 XX
 AC ABB52302;
 XX 08-FEB-2002 (first entry)
 XX Human API-40 tryptic digest peptide #2.
 XX Human; neuroprotective; nootropic; gene therapy; vaccine;
 KW Alzheimer's disease; Alzheimer's Disease-Associated Feature; AF;
 KW Alzheimer's Disease-Associated Protein Isoform; API; tryptic digest;
 KW Expression Reference Protein Isoform; ERPI; proteolysis.
 XX Homo sapiens.
 OS

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XX PN WO200175454-A2.
XX PD 11-OCT-2001.
XX PF 03-APR-2001; 2001WO-US010908.
XX PR 03-APR-2000; 2000US-0194504P.
XX PT 28-NOV-2000; 2000US-0253647P.
XX PA (OXFO-) OXFORD GLYCOSCIENCES UK LTD.
XX PF (PFIZ ) PFIZER INC.
XX PI Durham KL, Friedman DL, Herath HM, Kimmel LH, Parekh RB;
XX PI Potter DM, Rohlf C, Silber BM, Stiger TR, Sunderland PT;
XX PI Townsend RR, White F, Williams SA;
XX DR WPI; 2001-639384/73.
XX XX Screening for Alzheimer's disease in a mammal, by making two-dimensional
XX PT array of a feature whose relative abundance correlates with disease, and
XX PT comparing with abundance of the feature in samples of healthy persons.
XX XX Example; Page 33; 162pp; English.
XX PS The invention relates to methods for the screening, diagnosis and
XX CC prognosis of Alzheimer's disease. The methods involve the detection of
XX CC Alzheimer's Disease-Associated Features (AFs) and Alzheimer's Disease-
XX CC Associated Protein Isoforms (APIs) in cerebrospinal fluid, serum or
XX CC plasma. The abundance of the APs and APIs is then normalised to an
XX CC Expression Reference Protein Isoform (ERPI) in order to determine whether
XX CC a patient is suffering from, or has a predisposition to, Alzheimer's
XX CC disease. The relative abundance of the APs and APIs correlates with the
XX CC severity of Alzheimer's Disease. The present sequence is a peptide
XX CC produced from an API by proteolysis
XX XX Sequence 10 AA;
SQ Query Match 100.0%; Score 46; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.084;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALVQOQMEQLR 10
Db |||||
1 ALVQOQMEQLR 10

RESULT 7
ABBS2318
ID ABB52318 standard; peptide; 10 AA.
XX AC ABB52318;
XX DT 08-FEB-2002 (first entry)
XX DE Human API-43 tryptic digest peptide #3.
XX KW Human; neuroprotective; nootropic; gene therapy; vaccine;
XX KW Alzheimer's disease; Alzheimer's Disease-Associated Feature; AF;
XX KW Alzheimer's Disease-Associated Protein Isoform; API; tryptic digest;
XX KW Expression Reference Protein Isoform; ERPI; proteolysis.
XX OS Homo sapiens.
XX PN WO200175454-A2.
XX PD 11-OCT-2001.
XX PF 03-APR-2001; 2001WO-US010908.
XX PR 03-APR-2000; 2000US-0194504P.
XX PT 28-NOV-2000; 2000US-0253647P.
XX PA (OXFO-) OXFORD GLYCOSCIENCES UK LTD.
XX PF (PFIZ ) PFIZER INC.
XX PI Durham KL, Friedman DL, Herath HM, Kimmel LH, Parekh RB;
XX PI Potter DM, Rohlf C, Silber BM, Stiger TR, Sunderland PT;
XX PI Townsend RR, White F, Williams SA;
XX DR WPI; 2001-639384/73.
XX XX Screening for Alzheimer's disease in a mammal, by making two-dimensional
XX PT array of a feature whose relative abundance correlates with disease, and
XX PT comparing with abundance of the feature in samples of healthy persons.
XX XX Example; Page 33; 162pp; English.
XX PS The invention relates to methods for the screening, diagnosis and
XX CC prognosis of Alzheimer's disease. The methods involve the detection of
XX CC Alzheimer's Disease-Associated Features (AFs) and Alzheimer's Disease-
XX CC Associated Protein Isoforms (APIs) in cerebrospinal fluid, serum or
XX CC plasma. The abundance of the APs and APIs is then normalised to an
XX CC Expression Reference Protein Isoform (ERPI) in order to determine whether
XX CC a patient is suffering from, or has a predisposition to, Alzheimer's
XX CC disease. The relative abundance of the APs and APIs correlates with the
XX CC severity of Alzheimer's Disease. The present sequence is a peptide
XX CC produced from an API by proteolysis
XX XX Sequence 10 AA;
SQ Query Match 100.0%; Score 46; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.084;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALVQOQMEQLR 10
Db |||||
1 ALVQOQMEQLR 10

RESULT 8
ABPS7133
ID ABPS7133 standard; peptide; 10 AA.
XX AC ABPS7133;
XX DT 16-APR-2003 (first entry)
XX DE Breast cancer associated tryptic digest peptide SEQ ID NO:12.
XX KW Breast cancer associated feature; BF; BPI; breast cancer; diagnosis;
XX KW breast cancer associated protein isoform; cytostatic; gene therapy.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO200288750-A2.
XX PD 07-NOV-2002.
XX PF 02-MAY-2002; 2002WO-GB002022.
XX PR 02-MAY-2001; 2001GB-00010790.
XX PR 27-JUL-2001; 2001GB-00018385.
XX PR 14-AUG-2001; 2001GB-00019791.
XX PR 16-AUG-2001; 2001GB-00020045.
XX PR 22-NOV-2001; 2001GB-00028062.
XX PA (OXFO-) OXFORD GLYCOSCIENCES UK LTD.
XX PI Herath HM;
XX XX WPI; 2003-175048/17.
XX PT Screening, diagnosing or determining the stage or severity of breast
XX PT cancer, comprises analyzing and quantitatively detecting Breast Cancer-

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PT Associated Features or Breast Cancer-Associated Protein Isoforms in a
 XX biological sample.
 PS Disclosure; Page 17; 88pp; English.
 XX
 CC The present invention describes a method for screening, diagnosing or
 CC determining the stage or severity of breast cancer, identifying a subject
 CC at risk of developing breast cancer, or monitoring the effect of therapy
 CC administered to a subject with breast cancer, by generating a two-
 CC dimensional array of features comprising breast cancer-associated
 CC features (BPs), or quantitatively detecting breast cancer-associated
 CC protein isoforms (BPIs). Also described: (1) an antibody capable of
 CC immunospecifically binding to one of the BPIs; (2) a pharmaceutical
 CC compositions comprising: (a) a BPI, or a nucleic acid encoding a BPI, and
 CC a carrier; or (b) the antibody of (1), or a fragment or derivative of the
 CC antibody, and a carrier; (3) screening for agents that interact with one
 CC or more BPIs, BPI fragments, polypeptides related to BPIs, or BPI-fusion
 CC proteins; (4) screening for or identifying agents that modulate the
 CC expression or activity of one or more BPIs, a BPI fragment, a BPI-related
 CC polypeptide, or BPI-fusion proteins; and (5) treating or preventing
 CC breast cancer. BPIs have cytostatic activity and can be used in gene
 CC therapy. Methods and kits comprising antibodies or the BPIs from the
 CC present invention can be used for screening, diagnosing or determining
 CC the stage or severity of breast cancer, identifying a subject at risk of
 CC developing breast cancer, or monitoring the effect of therapy
 CC administered to a subject with breast cancer. The antibodies, BPIs,
 CC nucleic acids encoding the BPIs, or an agent that modulates the activity
 CC of one or more BPIs are useful for treating or preventing breast cancer.
 CC ABP57104 to ABP57250 represent breast cancer associated tryptic digest
 CC peptides, which are used in the exemplification of the present invention
 XX
 XX Sequence 10 AA;
 SQ

Query Match 100.0%; Score 46; DB 6; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.084;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALVQOMEQLR 10
 DB 1 ALVQOMEQLR 10
 |||||
 |||||

RESULT 9
 ABR58784
 ID ABR58784 standard; peptide; 10 AA.
 AC ABR58784;
 XX
 XX 11-JUL-2003 (first entry)
 DT
 DE Alzheimer's Disease-associated protein isoform, API-325, SEQ ID 25.
 KW Nootropic; Neuroprotective; Alzheimer's disease; API; human;
 KW Alzheimer's Disease-associated protein isoform.
 XX
 OS Homo sapiens.
 XX
 XX WO2003028543-A2.
 PN
 XX
 PD 10-APR-2003.
 XX
 XX 03-OCT-2002; 2002WO-US031642.
 PF
 XX
 PR 03-OCT-2001; 2001US-0326708P.
 XX
 PA (PF12) PFIZER PROD INC.
 PA (OXFO-) OXFORD GLYCOSCIENCES UK LTD.
 XX
 XX Durham LK, Friedman DL, Herath HMA, Kimmel LH, Parekh RB;
 PI Potter DM, Rohlf C, Silber EM, Snyder PJ, Soares HD, Stiger TR;
 PI Sunderland PT, Townsend RR, White WF, Williams SA;
 XX
 XX WPI; 2003-371957/35.
 DR

XX Screening or diagnosing of Alzheimer's disease (AD) determine the stage
 PT or severity of AD in a subject, comprises analyzing a test sample of body
 PT fluid from the subject by 2-dimensional electrophoresis.
 XX
 PS Claim 2; Page 33; 179pp; English.
 XX
 CC The present invention relates to methods for screening or diagnosing
 CC Alzheimer's disease (AD) to determine the stage or severity of AD in a
 CC subject, to identify subject at risk of developing AD, or to monitor the
 CC effect of therapy administered. The methods comprise analysing a test
 CC sample of body fluid by 2-dimensional electrophoresis to generate a 2-
 CC dimensional array of AD-associated features (APs). The method
 CC alternatively comprises quantitatively detecting in a sample of body
 CC fluid from the subject, one or more AD-associated protein isoforms (APIs;
 CC ABR58710-ABR59184)
 XX
 XX Sequence 10 AA;
 SQ

Query Match 100.0%; Score 46; DB 6; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.084;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALVQOMEQLR 10
 DB 1 ALVQOMEQLR 10
 |||||
 |||||

RESULT 10
 ADH35746
 ID ADH35746 standard; peptide; 10 AA.
 XX
 XX ADH35746;
 XX
 DT 11-MAR-2004 (first entry)
 XX
 DE Apolipoprotein A-IV peptide.
 XX
 KW screening; differential diagnosis; neurological disorder;
 KW Alzheimer's disease; frontotemporal dementia; dementia with Lewy bodies;
 KW vascular dementia; depression; apolipoprotein E; Apo E;
 KW alpha-1-antitrypsin; alpha-1-beta glycoprotein; antithrombin III;
 KW Apo A-1; Apo A-IV; Apo J; gelsolin; haptoglobin;
 KW hemopexin Ig alpha-1 chain C region; kininogen;
 KW prostaglandin-H2 D-isomerase; transthyretin; vitamin D-binding protein;
 KW Zn-alpha-2-glycoprotein.
 XX
 OS Synthetic.
 XX
 XX WO2004001421-A2.
 PN
 XX
 PD 31-DEC-2003.
 XX
 PF 18-JUN-2003; 2003WO-EP006469.
 XX
 XX 21-JUN-2002; 2002EP-00447121.
 PR 17-JUL-2002; 2002US-0396438P.
 XX
 XX (INNO-) INNOGENETICS NV.
 PA
 XX
 XX Kostanjevecki V, Vanmechelen E, De Brabandere V;
 PI WPI; 2004-071781/07.
 DR
 XX
 XX Screening, diagnosing and/or prognosing a mammal with neurological
 PT disorders comprises detecting, in the mammal the level of at least one
 PT proteins, e.g. Apo E, alpha-1-antitrypsin, alpha-1-beta glycoprotein,
 PT antithrombin III, or Apo A-1.
 XX
 XX Example 2; Page 73; 106pp; English.
 PS
 XX The present invention describes a method for screening, (differential)
 CC diagnosing and/or prognosing a mammal with neurological disorders, and

CC identifying a mammal at risk of or monitoring the effect of therapy
 CC administered to a mammal having Alzheimer's disease (AD), frontotemporal
 CC dementia (FTD), dementia with Lewy bodies (DLB), vascular dementia (VAD),
 CC and/or depression. The method comprises: (a) detecting, in a mammal the
 CC level of at least one of apolipoprotein (Apo) E, alpha-1-antitrypsin,
 CC alpha-1-beta glycoprotein, antithrombin III, Apo A-1, Apo A-IV, Apo J,
 CC gelsolin, haptoglobin, hemopexin Ig alpha-1 chain C region (heavy),
 CC kininogen, prostaglandin-H2 D-isomerase, transthyretin, vitamin D-binding
 CC protein, Zn-alpha-2-glycoprotein or its isoform; (b) comparing the level
 CC of the at least one protein or protein isoform detected with a range of
 CC levels of mammals suffering from AD, FTD, DLB, VAD or depression and with
 CC range of levels of control mammals; and (c) concluding from the
 CC comparison whether the mammal is suffering from AD, FTD, DLB, VAD or
 CC depression. Also described: (1) a composition comprising at least one of
 CC the following protein isoforms associated with AD, FTD, DLB, VAD or
 CC depression; (2) an antibody capable of specifically recognising one of
 CC the protein isoforms of (1); (3) a kit comprising the antibody of (2);
 CC and (4) screening for agents that interact with and/or modulate the
 CC expression or activity of a protein or protein isoform. The method is
 CC useful in screening, diagnosing and/or prognosing a mammal with
 CC neurological disorders. The antibody is useful in preparing a kit for
 CC screening, (differential) diagnosing or prognosing a mammal with,
 CC identifying a mammal at risk of or monitoring the effect of therapy
 CC administered to a mammal having AD, FTD, DLB, VAD and/or depression. The
 CC present sequence represents a peptide used in the identification of the
 CC protein spots that were altered between the studied groups, which is used
 CC in the exemplification of the present invention.

XX Sequence 10 AA;

Query Match 100.0%; Score 46; DB 8; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.084;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALVQQMEQLR 10
 |||||
 Db 1 ALVQQMEQLR 10

RESULT 11

ADH35753
 ID ADH35753 standard; peptide; 10 AA.

XX ADH35753;

XX 11-MAR-2004 (first entry)

DT Apolipoprotein A-IV peptide.

XX screening; differential diagnosis; neurological disorder;
 KW Alzheimer's disease; frontotemporal dementia; dementia with Lewy bodies;
 KW vascular dementia; depression; apolipoprotein E; Apo E;
 KW alpha-1-antitrypsin; alpha-1-beta glycoprotein; antithrombin III;
 KW Apo A-1; Apo A-IV; Apo J; gelsolin; haptoglobin;
 KW hemopexin Ig alpha-1 chain C region; kininogen;
 KW prostaglandin-H2 D-isomerase; transthyretin; vitamin D-binding protein;
 KW Zn-alpha-2-glycoprotein.

XX Synthetic.

XX WO2004001421-A2.

PN 31-DEC-2003.

XX 18-JUN-2003; 2003WO-EP006469.

XX 21-JUN-2002; 2002EP-00447121.

PR 17-JUL-2002; 2002US-0396438P.

XX (INNO-) INNOGENETICS NV.

PA Kostasjevecki V, Vannechelen E, De Brabandere V;

XX

DR WPI; 2004-071781/07.

XX Screening, diagnosing and/or prognosing a mammal with neurological
 PT disorders comprises detecting, in the mammal the level of at least one
 PT proteins, e.g. Apo E, alpha-1-antitrypsin, alpha-1-beta glycoprotein,
 PT antithrombin III, or Apo A-1.

XX Example 2; Page 73; 106pp; English.

XX The present invention describes a method for screening, (differential)
 CC diagnosing and/or prognosing a mammal with neurological disorders, and
 CC identifying a mammal at risk of or monitoring the effect of therapy
 CC administered to a mammal having Alzheimer's disease (AD), frontotemporal
 CC dementia (FTD), dementia with Lewy bodies (DLB), vascular dementia (VAD),
 CC and/or depression. The method comprises: (a) detecting, in a mammal the
 CC level of at least one of apolipoprotein (Apo) E, alpha-1-antitrypsin,
 CC alpha-1-beta glycoprotein, antithrombin III, Apo A-1, Apo A-IV, Apo J,
 CC gelsolin, haptoglobin, hemopexin Ig alpha-1 chain C region (heavy),
 CC kininogen, prostaglandin-H2 D-isomerase, transthyretin, vitamin D-binding
 CC protein, Zn-alpha-2-glycoprotein or its isoform; (b) comparing the level
 CC of the at least one protein or protein isoform detected with a range of
 CC levels of mammals suffering from AD, FTD, DLB, VAD or depression and with
 CC range of levels of control mammals; and (c) concluding from the
 CC comparison whether the mammal is suffering from AD, FTD, DLB, VAD or
 CC depression. Also described: (1) a composition comprising at least one of
 CC the following protein isoforms associated with AD, FTD, DLB, VAD or
 CC depression; (2) an antibody capable of specifically recognising one of
 CC the protein isoforms of (1); (3) a kit comprising the antibody of (2);
 CC and (4) screening for agents that interact with and/or modulate the
 CC expression or activity of a protein or protein isoform. The method is
 CC useful in screening, diagnosing and/or prognosing a mammal with
 CC neurological disorders. The antibody is useful in preparing a kit for
 CC screening, (differential) diagnosing or prognosing a mammal with,
 CC identifying a mammal at risk of or monitoring the effect of therapy
 CC administered to a mammal having AD, FTD, DLB, VAD and/or depression. The
 CC present sequence represents a peptide used in the identification of the
 CC protein spots that were altered between the studied groups, which is used
 CC in the exemplification of the present invention.

XX Sequence 10 AA;

Query Match 100.0%; Score 46; DB 8; Length 10;

Best Local Similarity 100.0%; Pred. No. 0.084;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALVQQMEQLR 10

|||||
 Db 1 ALVQQMEQLR 10

RESULT 12

ADN31699

ID ADN31699 standard; peptide; 10 AA.

XX ADN31699;

XX 01-JUL-2004 (first entry)

XX Human Alzheimer's disease-API tryptic digest peptide - SEQ ID 25.

XX Alzheimer's disease; nootropic; neuroprotective; cerebrospinal fluid;
 KW CSF; Alzheimer's disease-associated protein isoform; API; tryptic digest;
 KW human.

OS Homo sapiens.

XX EP1408333-A2.

XX 14-APR-2004.

XX 03-OCT-2002; 2002EP-00256893.

XX 03-OCT-2002; 2002US-0326708P.

XX (PFIZ) PFIZER PROD INC.
PA (OXFO-) OXFORD GLYSCSCIENCES UK LTD.
XX
XX Durham LK, Friedman DL, Herath HM, Kimmel LH, Parekh RB;
PI Potter DM, Rohlf C, Silber EM, Snyder PJ, Soares HD, Stiger TR;
PI Sunderland PT, Townsend RR, White WF, Williams SA;
XX WPI; 2004-318939/30.
XX
XX Screening or diagnosis of Alzheimer's disease (AD) in subject.
PT determining stage or severity of AD, identifying subject at risk of
PT developing AD, or monitoring effect of therapy, by detecting Alzheimer's
PT disease-Associated Features.
XX
XX Example; SEQ ID NO 25; 208pp; English.
XX
XX The invention relates to a novel method for screening or diagnosis of
CC Alzheimer's disease (AD) in a subject, determining the stage or severity
CC of AD, identifying a subject at risk of developing AD or monitoring the
CC effect of therapy administered to a subject having AD, by analysing body
CC fluid to generate a two-dimensional array of Alzheimer's disease-
CC associated features (AFs) such as AF-200, AF-201, AF-202, AF-203, AF-204,
CC AF-205, etc., and comparing the abundance of AFs with a control. The
CC method of the invention has nootropic and neuroprotective applications
CC and may be useful for screening or diagnosis of Alzheimer's disease (AD)
CC in a subject, determining the stage or severity of AD in a subject,
CC identifying a subject at risk of developing AD or monitoring the effect
CC of therapy administered to a subject having AD. The body fluid is
CC cerebrospinal fluid (CSF). The current sequence is that of a human
CC Alzheimer's disease-associated protein isoform (API) tryptic digest
CC peptide of the invention.
XX
XX Sequence 10 AA;
SQ

Query Match 100.0%; Score 46; DB 8; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.084;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALVQOMEQLR 10
|||
Db 1 ALVQOMEQLR 10

RESULT 13
ADO78943
ID ADO78943 standard; peptide; 10 AA.
XX
XX ADO78943;
AC
XX
XX 26-AUG-2004 (first entry)
DT
XX
XX Schizophrenia-Associated Protein Isoform (SPI) seqid 561.
DE
XX neuroleptic; Schizophrenia; immunospecific binding;
KW Schizophrenia-Associated Protein Isoform; SPI; schizophrenia screening;
KW Schizophrenia diagnosing; schizophrenia prognosing;
KW Schizophrenia treatment; drug development; cerebrospinal fluid; human.
XX
XX Homo sapiens.
OS
XX US2004110938-A1.
PN
XX
XX 10-JUN-2004.
PD
XX
XX 23-FEB-2001; 2001US-00791377.
PF
XX
XX 24-FEB-2000; 2000GB-00044156.
PR
XX 28-DEC-2000; 2000US-00750395.
PR
XX
XX (PARE/) PAREKH R B.
PA (HERA/) CHANDRASIRI HERATH H M A.
PA (ROHL/) ROHLFF C.
PI

PA (TERR/) TERRETT J A.
PA (TYSO/) TYSON K L.
XX
XX Parekh RB, Chandrasiri Herath HMA, Rohlf C, Terrett JA, Tyson KL;
XX WPI; 2004-440403/41.
XX
XX New isolated nucleic acid molecule, useful for diagnosing Schizophrenia,
PT for monitoring the effectiveness of Schizophrenia treatment or for
PT screening agents for treating Schizophrenia.
XX
XX Disclosure; SEQ ID NO 561; 170pp; English.
XX
XX The invention describes an isolated nucleic acid molecule (I) that
CC hybridises to two short nucleic acid sequences and the 1515 amino acid
CC sequence fully defined in the specification. Also described are: a
CC preparation comprising an isolated peptide coded for by the nucleic acid
CC molecule above, or comprising an isolated human protein comprising one or
CC more of the following sequences: Glu-Leu-Asp-Val-Leu-Gln-Gly-Arg, and Gly
CC -Ile-Leu-Ile-Leu-Gln-Gln-Asp-Thr-Leu-Gly-Arg; methods for
CC diagnosing Schizophrenia; antibodies capable of immunospecific binding to
CC a Schizophrenia-associated Protein Isoform (SPI); methods of treating
CC Schizophrenia; and methods of screening for agents that modulate a
CC characteristic (e.g., expression or binding activity) of an SPI, an SPI
CC analogue, or an SPI-related polypeptide. The nucleic acid molecule and
CC encoded proteins, as well as the methods and compositions are useful for
CC screening, diagnosing, and prognosing Schizophrenia, for monitoring the
CC effectiveness of Schizophrenia treatment, for identifying patients most
CC likely to respond to a particular therapeutic treatment and for
CC developing drug. They are also useful for screening modulators of
CC Schizophrenia-Associated Protein Isoform useful for treating
CC Schizophrenia. This is the amino acid sequence a schizophrenia-associated
CC protein isoform increased in the cerebrospinal fluid of schizophrenia
CC patients.
XX
XX Sequence 10 AA;
SQ

Query Match 100.0%; Score 46; DB 8; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.084;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALVQOMEQLR 10
|||
Db 1 ALVQOMEQLR 10

RESULT 14
ADE52383
ID ADE52383 standard; peptide; 12 AA.
XX
XX ADE52383;
AC
XX
XX 29-JAN-2004 (first entry)
DT
XX
XX Human apolipoprotein biopolymer marker #1.
DE
XX human; apolipoprotein biopolymer marker; disease state regulation;
KW therapeutic avenue.
KW
XX
XX Homo sapiens.
OS
XX US2003100014-A1.
PN
XX
XX 29-MAY-2003.
PD
XX
XX 23-NOV-2001; 2001US-00991809.
PF
XX
XX 23-NOV-2001; 2001US-00991809.
PR
XX
XX (JACK/) JACKOWSKI G.
PA (MARS/) MARSHALL J.
PA
XX Jackowski G, Marshall J;
PI

XX WPI; 2004-031198/03.
XX
XX New apolipoprotein biopolymer marker useful for indicating at least one
PT particular disease state, such as, Type II diabetes, using e.g. mass
PT spectrometric analysis.
XX
XX Claim 1; Page 11; 17pp; English.
XX
XX The invention relates to an apolipoprotein biopolymer marker or its
CC analyte useful in indicating a particular disease state. The
CC apolipoprotein biopolymer marker is useful for regulating a disease state
CC by controlling the presence or absence of apolipoprotein biopolymer
CC marker. The apolipoprotein biopolymer marker or a diagnostic kit is
CC useful for identifying therapeutic avenues related to a disease state,
CC which involves conducting an analysis by using the diagnostic kit and
CC interacting with apolipoprotein biopolymer marker. The present sequence
CC represents the amino acid sequence of a human apolipoprotein biopolymer
CC marker.
XX
XX Sequence 12 AA;
SQ

Query Match 100.0%; Score 46; DB 8; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.1;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALVQQMEQLR 10
Db 2 ALVQQMEQLR 11
|||||

RESULT 15
AAR82729
ID AAR82729 standard; peptide; 28 AA.
XX
XX AAR82729;
XX AC
XX
XX DT 03-MAY-1996 (first entry)
XX DE Human apolipoprotein A-IV fragment.
XX KW apolipoprotein; apo A-IV; appetite suppressant; food intake.
XX OS Synthetic.
XX
XX PN WO9525749-A2.
XX
XX PD 28-SEP-1995.
XX
XX PF 22-MAR-1995; 95WO-US003660.
XX
XX PR 22-MAR-1994; 94US-00216537.
XX
XX (RESE) RESEARCH CORP TECHNOLOGIES INC.
XX PA
XX PI Tso P;
XX
XX WPI; 1995-344590/44.
XX
XX Method to suppress appetite or inhibit food intake - by admin of the 35 N
PT -terminal amino acids of mature mammalian apo A-IV protein, or analogues,
PT homologues or fragments.
XX
XX Claim 8; Page 11; 100pp; English.
XX
XX Novel eating suppressant peptides are provided which are derived from
CC apolipoprotein A-IV and have been made by solid phase peptide synthesis.
CC The peptides comprise at least a fragment of a 14 amino acid sequence
CC derived from the amino terminal portion of mature apo A-IV. Smaller
CC fragments (e.g. 3-13 amino acids) and larger peptides (e.g. 15-30 amino
CC acids) can also be used, as can homologues of these sequences. Because of
CC their small size, the peptides can pass the blood brain barrier if
CC necessary. They are not immunogenic, and they provide a specific

CC satiation signal. The present sequence, which is corresponds
CC substantially to residues 316-346 of human apo A-IV precursor, is a
CC specifically claimed example of the new peptides
XX
XX Sequence 28 AA;
SQ

Query Match 100.0%; Score 46; DB 2; Length 28;
Best Local Similarity 100.0%; Pred. No. 0.24; 0; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;

QY 1 ALVQQMEQLR 10
Db 1 ALVQQMEQLR 10
|||||

Search completed: September 3, 2005, 19:58:52
Job time : 89.7805 secs